

АНДРЕЯ ДОБРОСАВЛЄВИЧ, СНЕЖАНА УРОШЕВИЧ

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СУЧАСНИЙ МЕНЕДЖМЕНТ БІЗНЕС-ПРОЦЕСІВ В МЕЖАХ ЛАНЦЮЖКА ПОСТАЧАННЯ ІНДУСТРІЇ МОДИ

Мета. Бізнес-процеси присутні у всіх типах підприємств, незалежно від розміру або галузі, в якій діє підприємство. Успішне управління бізнес-процесами (BPM) є показником рівня сталості організаційних процесів. В рамках ланцюга поставок можна спостерігати наявність бізнес-процесів спільного характеру, оскільки BPM спирається на принципи партнерства, розвитку та обміну інформацією через зв'язки, що існують у цьому ланцюгу між усіма суб'єктами [1]. У цій роботі розглядається BPM у відносинах з постачальниками та споживачами в ланцюгу поставок підприємств, які працюють в індустрії моди. Ламберт [2] перелічує вісім макропроцесів, що відбуваються в ланцюгу поставок, між постачальниками, виробниками, дистриб'юторами, роздрібними продавцями та кінцевими споживачами, а саме: управління взаємовідносинами з клієнтами, управління взаємовідносинами з постачальниками, управління попитом, виконання замовлень, управління потоками виробництва, удосконалення продукції, а також комерціалізація та менеджмент повернень. У рамках цієї статті представлено дослідження, яке аналізує сегменти управління спільними бізнес-процесами в ланцюгу поставок індустрії моди на основі відповідей 508 менеджерів та працівників індустрії моди в Республіці Сербія. Досліджено потреби у розвитку окремих сегментів відповідно до потреб сучасного менеджменту бізнес-процесів.

Наукова новизна. Дослідницька частина цієї статті спирається на застосування тесту Фрідмана, який дозволяє аналізувати поточний стан BPM у відносинах з постачальниками та споживачами в ланцюгу поставок індустрії моди, що виражається у відповідях працівників із ранжируванням їх уподобань. Матеріал статті сприяє створенню бази знань в рамках досліджень у галузі впливу BPM на вдосконалення ланцюга поставок, на основі яких можна проводити подальші дослідження та розширювати знання.

Практичне значення. Результати, досліджень цього типу, сприяють розвитку бізнесу з різних аспектів. Переваги можуть бути відображені не лише через посилення конкурентних позицій, а й через сталість бізнесу на основі адекватного застосування практики BPM у всіх його сегментах. Відповідно, крім наукової новизни, яка відображається в результатах дослідницької роботи, є практична новизна, яка знайшла відображення в керівних принципах розвитку сучасного BPM в ланцюгу поставок індустрії моди.

Ключові слова: Управління бізнес-процесами, ланцюжок поставок, співробітництво, індустрія моди.

CONTEMPORARY MANAGEMENT OF BUSINESS PROCESSES WITHIN THE SUPPLY CHAIN OF FASHION INDUSTRY

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Purpose. Business processes are present in all types of organizations, regardless of the size or industry within which the organization operates. Successful business process management (BPM) is an indicator of the level of process maturity of the organization. Within the supply chain, it is possible to observe the presence of business processes of a collaborative nature, as BPM relies on the principles of partnership, development, and exchange of information through links that exist within this chain between all actors [1]. Within this paper, BPM in the relations with suppliers and consumers within the supply chain of organizations operating in the fashion industry is considered. Lambert [2] lists eight macro processes that take place in the supply chain, between suppliers, manufacturers, distributors, retailers and end consumers, as follows: customer relationship management, supplier relationship management, demand management, order execution, flow management production, product development and commercialization and return management. Within this paper, a research is presented which analyzes

the segments of managing collaborative business processes within the supply chain of the fashion industry, based on the responses of 508 managers and employees in the fashion industry in the Republic of Serbia. The needs for the development of certain segments in accordance with the needs of modern business process management have been explored.

Scientific novelty. *The research part of this paper relies on the application of Friedman's test which enables the analysis of the current state of BPM in relations with suppliers and consumers within the supply chain of the fashion industry, expressed through workers' responses with a ranking of their preferences. This paper contributes to the creation of a knowledge base within the research in the field of the impact of BPM on improvements in the supply chain, on the basis of which it is possible to conduct further research and upgrade knowledge.*

Practical value. *The findings derived from the results of research of this type contribute to the development of the business from various aspects. The benefits can be reflected not only through the strengthening of the competitive position but also through the sustainability of business on the basis of adequate application of BPM practices in all business segments. Accordingly, in addition to the scientific novelty, which is reflected in the results of the research work, there is a practical novelty, which is reflected in the guidelines for the development of modern BPM within the supply chain of the fashion industry.*

Keywords: *Business Process Management (BPM), Supply chain, Supply chain business processes, Collaborative processes, Fashion industry.*

Objectives. The main goal of this paper is to consider the directions of development of contemporary BPM in the relations with primary and secondary suppliers and consumers within the supply chain of the fashion industry.

Methodology. In accordance with the defined goal of the research, the basic research question is defined, which reads: "Which segments in the relations with suppliers and consumers in the supply chain of the fashion industry should be improved in accordance with contemporary BPM?" The segments of BPM that are recognized in relations with suppliers are the establishment of long-term partnerships with suppliers, cooperation in improving collaborative business processes, and the establishment of a functional flow of information within collaborative business processes. The BPM segments in customer relations are: understanding the characteristics of products that contribute to added value, systematic improvement of business processes based on consumer feedback and product design and development based on consumer needs [3]. The research included 508 respondents, including managers and employees in micro, small and medium, and large organizations of the fashion and clothing industry of the Republic of Serbia. In order to analyze which of the segments indicates the need for improvements in accordance with the contemporary BPM and thus answer the research question, we analyze the representation of BPM segments in relations with suppliers and consumers in the supply-chain, or ranking their representation using Friedman - this test within the IBM SPSS Statistics software package for analysis and statistical data processing, which is a non - parametric alternative to the One - way ANOVA test [4,5]. Friedman's test is useful in determining the preferences of respondents

regarding individual attitudes collected by applying the scale of BPM segments within the supply chain in the fashion industry.

Research results. In process-mature organizations, cooperation with suppliers is at the level of process [6]. Various dimensions of supply chain relationships impact the quality of process performance, such as trust, commitment adaptation, collaboration and communication [7]. Research [8] emphasizes the impact of BPM on strengthening organizational performance, and on cooperation within the supply chain. The success of the entire process of placing fashion items on the market depends on the ability of organizations to ensure the quality of the products themselves and all processes leading to the final result, as well as processes that occur in collaboration of manufacturers with suppliers and consumers when placing products on the market [9]. A significant share in the added value of products is generated in the supply chain [10]. With this in mind, the idea arises to consider the segments of managing cooperative processes between suppliers and consumers within the supply chain of the fashion industry in order to learn about the potential directions of development of these relations in accordance with modern business conditions. Using the Friedman test, the preferences of 508 managers and employees included in the research were ranked, in terms of business process management segments in relations with suppliers and consumers in the fashion industry. Within Table 1, descriptive statistics of respondents' responses are presented. The number of respondents, the mean value of their answers, and the standard deviation. Grades from 1 to 5 were used to express the level of representation of certain business

process management segments in the supply chain of the fashion industry, where 1 indicates underrepresentation while 5 indicates a high level of representation. Based on the calculated

mean values of the respondents' ratings, the best rated segment is the segment of long-term cooperation and partnership in relations with suppliers.

Table 1 – Descriptive statistics of responses on the scale of segments in relations with suppliers and consumers in fashion industry

	Segment	N	Mean	Std. Deviation
Relations with suppliers	Established long-term partnerships with suppliers	508	3.9429	.72887
	Collaboration on improving collaborative business processes	508	3.4665	.87077
	Establishment of functional information flow	508	3.1260	.99499
Relations with consumers	Understanding the characteristics of products that contribute to added value	508	3.4331	.74145
	Systematic process improvement based on feedback	508	3.3071	.78207
	Product design and development based on consumer needs	508	3.4035	.75926

By applying the Friedman test, the ranks of expressed preferences shown in Table 2 were obtained.

Table 2 – Ranks of demonstrated preferences

	Segment	Mean rank
Relations with suppliers	Established long-term partnerships with suppliers	4.64
	Collaboration on improving collaborative business processes	3.55
	Establishment of functional information flow	2.86
Relations with consumers	Understanding the characteristics of products that contribute to added value	3.42
	Systematic process improvement based on feedback	3.16
	Product design and development based on consumer needs	3.36

In this way, it is possible to evaluate the representation of BPM segments in the supply chain of the fashion industry and draw conclusions about the guidelines for harmonizing BPM within the supply chain with contemporary business requirements. Based on the ranks of expressed preferences of respondents, it is possible to conclude that the segment of establishing a functional flow

of information among suppliers was assessed as the weakest link, followed by systematic improvement of the process based on feedback in relations with primary and secondary consumers. And how Mentzas et al. [11] state the effectiveness of BPM depends on the consistency of information flow between all participants in the process. Table 3 presents the statistics of the Friedman test.

Table 3 – **Friedman's test statistics**

N	508
Chi-square	419.850
df	5
Asymp. Sig.	.000

From Table 3 it can be seen that between the mean values of the BPM segments in the supply chain of the fashion industry there are statistically significant differences based on the responses

of surveyed managers and employees, $\chi^2(5) = 419.850$, $p = .000$.

Conclusion. Within this paper, the analysis of the representation of BPM segments in relations with suppliers and consumers in the supply chain, ie the ranking of their representation using the Friedman test, was performed. The results of both tests provided an answer to the research question. Under the requirements of contemporary BPM, it is necessary to strengthen the segments related to the development of functional information flow in collaborative processes with suppliers and systematic process improvement based on feedback in collaborative processes with consumers.

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